

## CLAIMS :

1. A video processing method provided for processing an input image sequence consisting of successive frames, said processing method comprising for each successive frame the steps of :
  - 5 a) preprocessing each successive current frame by means of the sub-steps of :
    - computing for each frame a so-called content-change strength (CCS) ;
    - defining from the successive frames and the computed content-change strength the structure of the successive frames to be processed ;
  - b) processing said pre-processed frames ;
- 10 wherein said CCS indication is re-used in a video content analysis step providing an additional input for a detection of any feature of said content.
2. A method according to claim 1, in which each frame is itself subdivided into sub-structures.
3. A method according to claim 2, in which said sub-structures are blocks.
- 15 4. A method according to claim 2, in which said sub-structures are objects of any kind of shape.
5. A method according to claim 2, in which said sub-structures are segments.
6. Application of the method of claim 1 to the implementation of a video encoding method provided for encoding an input image sequence consisting of successive frames, said
- 20 encoding method comprising for each successive frame the steps of :
  - a) preprocessing each successive current frame by means of the sub-steps of :
    - computing for each frame a so-called content-change strength (CCS) ;
    - defining from the successive frames and the computed content-change strength the structure of the successive frames to be encoded ;
  - 25 - storing the frames to be encoded in an order modified with respect to the order of the original sequence of frames ;
  - b) encoding the re-ordered frames ;
- wherein said CCS indication is re-used in a video content analysis step providing an additional input for a detection of any feature of said content.
- 30 7. A method according to claim 6, in which each frame is itself subdivided into sub-structures.
8. A method according to claim 7, in which said sub-structures are blocks.
9. A method according to claim 7, in which said sub-structures are objects of any kind of shape.

10. A method according to claim 7, in which said sub-structures are segments.

11. A video encoding device provided for encoding an input image sequence consisting of successive groups of frames in which each frame is itself subdivided into blocks, said encoding device comprising the following means, applied to each successive frame :

- 5       a) preprocessing means, applied to each successive current frame ;  
         b) estimating means, provided for estimating a motion vector for each block ;  
         c) generating means, provided for generating a predicted frame on the basis of said motion vectors respectively associated to the blocks of the current frame ;  
         d) transforming and quantizing means, provided for applying to a difference signal  
10       between the current frame and the last predicted frame a transformation producing a plurality of coefficients and followed by a quantization of said coefficients ;  
         e) coding means, provided for encoding said quantized coefficients ;  
      said preprocessing means comprising itself the following means :  
          - computing means, provided for computing for each frame a so-called  
15       content-change strength (CCS) ;  
          - defining means, provided for defining from the successive frames and the computed content-change strength the structure of the successive groups of frames to be encoded ;  
          - storing means, provided for storing the frames to be encoded in an order  
20       modified with respect to the order of the original sequence of frames ;  
      wherein said CCS indication is re-used in a video content analysis step providing an additional input for a detection of any feature of said content.